



DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION

MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION
11805 SW 26 Street, Room 208
Miami, Florida 33175-2474
T (786) 315-2590 F (786) 315-2599

www.miamidade.gov/economy

NOTICE OF ACCEPTANCE (NOA)

Metal Tech, Inc.
7635 W. 2nd Court
Hialeah, FL 33014

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER- Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: "Maximum Impact Duraweld" Aluminum Hinged Bahama Shutter

APPROVAL DOCUMENT: Drawing No. 27102, titled "Maximum Impact Bahama Shutter", sheets 1 through 5 of 5, prepared by Ramms Engineering, Inc., dated December 01, 2007, signed and sealed by Robert S. Monsour, P.E., on March 27, 2008, bearing the Miami-Dade County Product Control Renewal stamp with the Notice of Acceptance number and the expiration date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: Large and Small Missile Impact

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state, the following statement: "Miami-Dade County Product Control Approved", NOA number, and TAS-201, TAS-202, and TAS-203, unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA renews NOA # 07-1210.03 and consists of this page 1, evidence submitted page E-1, as well as approval document mentioned above.

The submitted documentation was reviewed by Jaime D. Gascon, P.E.



J. Gascon
4/18/13

NOA No. 13-0306.03
Expiration Date: 05/08/2018
Approval Date: 04/25/2013
Page 1

Metal Tech, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. *Drawing No. 27102, titled "Maximum Impact Bahama Shutter", sheets 1 through 5 of 5, prepared by Ramms Engineering, Inc., dated December 01, 2007, signed and sealed by Robert S. Monsour, P.E., on March 27, 2008.*

B. TESTS

1. *Test report on TAS201-Large Missile Impact Test, TAS203-Cyclic Wind Pressure Test, and TAS202-Uniform Static Air Pressure Test of "Bahama Shutters", prepared by American Test Lab of South Florida, report No. ATLSF #1130.01-05, dated 06/26/2006, signed and sealed by William R. Mehner, P.E., and Henry Hattem, P.E.
(SUBMITTED UNDER PREVIOUS APPROVAL # 07-1210.03.)*

C. CALCULATIONS

1. *Metal Tech Duraweld Bahama Shutter Calculations prepared by Ramms Engineering, Inc., dated March 11, 2008, signed and sealed by Robert S. Monsour, P.E., on March 27, 2008.
(SUBMITTED UNDER PREVIOUS APPROVAL # 07-1210.03.)*

D. QUALITY ASSURANCE

1. *Miami-Dade Department of Regulatory and Economic Resources (RER).*

E. MATERIAL CERTIFICATIONS

1. *Component Material Reports of Aluminum Bahama Shutters, prepared by MI Metals, Inc. with material specifications.
(SUBMITTED UNDER PREVIOUS APPROVAL # 07-1210.03.)*

F. STATEMENTS

1. *Statement letter of conformance and compliance with the FBC-2010, dated 02/19/13, signed and sealed by Robert S. Monsour, P. E.*

G. OTHERS

1. *Notice of Acceptance No. 07-1210.03, issued to Metal Tech, Inc. for their "Maximum Impact Duraweld Aluminum Hinged Bahama Shutter", approved on 05/08/08 and expiring on 05/08/13.*



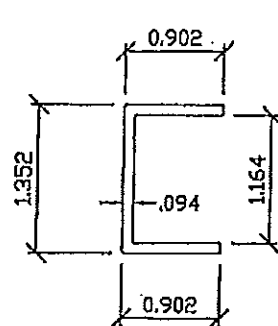
Jaime D. Gascon, P.E.
Product Control Section Supervisor
NOA No. 13-0306.03
Expiration Date: 05/08/2018
Approval Date: 04/25/2013



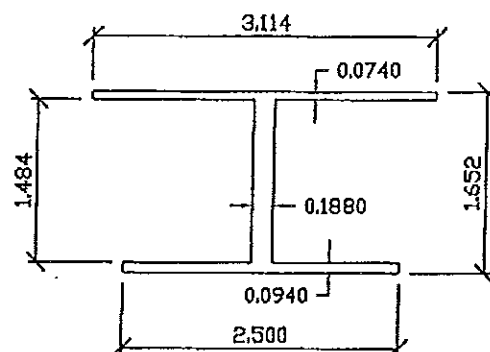
METALTECH, INC.

MAXIMUM IMPACT™

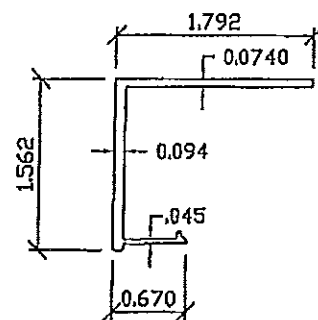
DURAWELD BAHAMA SHUTTER



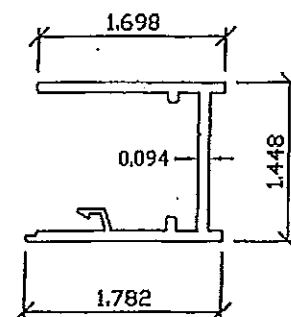
① MULLION INSERT



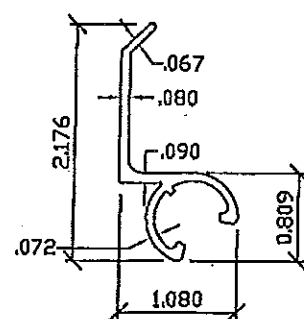
② MULLION



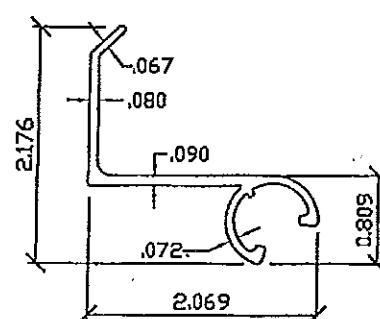
③ SNAP CAP



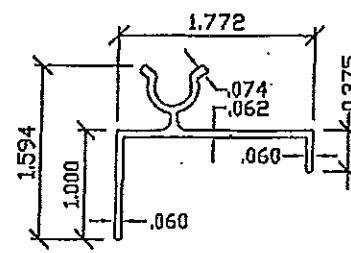
④ OUTER FRAME



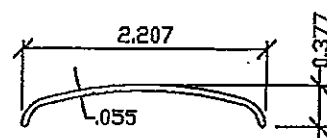
⑤A FEMALE HINGE



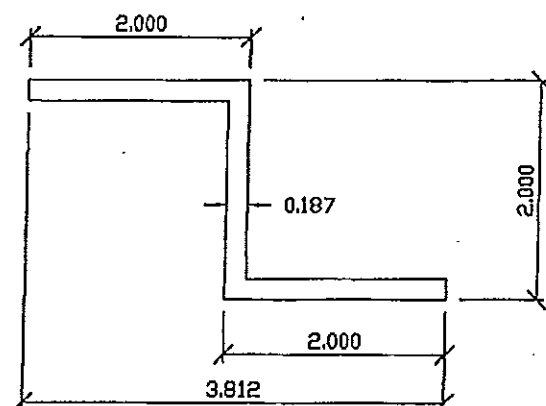
⑤B B/O FEMALE HINGE



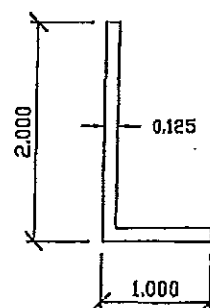
⑥ MALE HINGE



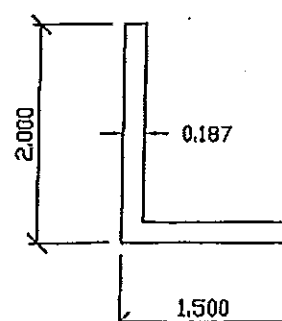
⑦ BLADE



⑧ TIE DOWN Z BRACKET
ALTERNATE TO ⑩



⑨ CORNER KEY



⑩ TIE DOWN ANGLE BRACKETS

NOTES:

HIGH VELOCITY HURRICANE ZONE

THIS METAL TECH BAHAMA SHUTTER COMPLIES WITH THE FLORIDA BUILDING CODE

FBC CERTIFIED TESTING IN ACCORDANCE WITH TAS 201-94, AND 202-94 AND 203-94 PROTOCOLS ALSO IN ACCORDANCE WITH E 1886-02 AND E 1996-02 STANDARDS

MINIMUM DESIGN LOADS CALCULATIONS PERFORMED PER ASCE 7 "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES"
ALL ALUMINUM EXTRUSIONS TO BE ALLOY 6063-T6

BACKING SHALL BE .093 THICK POLYCARBONATE SECURED WITH #64 or #68 S.S. POPRIVETS 15" O.C. MAX.

ANCHORAGE OF SHUTTER TO CONCRETE OR MASONRY AT HEADER SHALL BE WITH 1/4" MASONRY SCREWS WITH 1 1/4" MINIMUM EMBEDMENT.

ANCHORAGE OF SHUTTER TO CONCRETE OR MASONRY AT BRACKETS SHALL BE 1/4-20 MACHINE SCREW ANCHOR WITH 7/8" MINIMUM EMBEDMENT OR FEMALE PANELMATE WITH 1/4-20 M/S (FLOOR PLUG) WITH 1 1/4" MINIMUM EMBEDMENT OR 1/4" MALE PANELMATE WITH 1/4-20 WASHERED WINGNUTS WITH 1 1/4" MINIMUM EMBEDMENT.

ANCHORAGE OF SHUTTER TO WOOD AT HEADER SHALL BE 1/4" WOOD LAGS WITH 1" MIN. EMBEDMENT OR 1/4" MASONRY SCREWS WITH 1 7/8" MINIMUM EMBEDMENT

ANCHORAGE OF SHUTTER TO WOOD AT BRACKETS SHALL BE 1/4" MALE PANELMATES WITH 1/4-20 WASHERED WINGNUTS OR 1/4" FEMALE PANELMATE WITH 1/4-20 M.S. (FLOOR PLUG) WITH 1 7/8" MINIMUM EMBEDMENT.

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE SOUNDNESS OF THE STRUCTURE TO INSURE PROPER ANCHORAGE.

EACH BAHAMA SHUTTER SHALL BEAR PERMANENT LABEL SHOWING METAL TECH, INC. HIALEAH, FL - MIAMI DADE COUNTY. PRODUCT CONTROL APPROVED

Approved as complying with the
Florida Building Code
Date: 05/08/2008
NOA# 07-1210-03
Miami Dade Product Control
Division
By: *[Signature]*

PRODUCT RENEWED
as complying with the Florida
Building Code
Acceptance No. 13-0306.03
Expiration Date 05/08/2018
By: *[Signature]*
Miami Dade Product Control

ROBERT S. MONSOUR, PE
11955
RAMS ENGINEERING, INC.

RAMS ENGINEERING, INC.

Structural Design

2100 W. 70th STREET, SUITE 311
HIALEAH, FLORIDA 33015

EB 0006024

MAXIMUM IMPACT BAHAMA SHUTTER

METALTECH, INC.

7835 W. SECOND CT. HIALEAH, FL 33014



EST. 1957

SEP / RSM

12/01/2007

270102

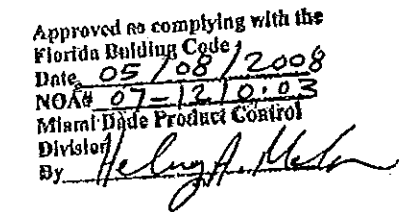
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REVISIONS	BY



Technical drawing of a blade assembly. The drawing shows a cross-section of a blade mounted on a base. The blade has a width of 2.207 and a height of 0.875. The base has a width of 0.125 and a height of 0.375. The blade is mounted on the base with a gap of 0.125 between them. The blade is labeled (7) BLADE (TYP.) with a leader line pointing to it.



PRODUCT RENEWED
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By [Signature]
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ROBERT S. MONSOUR, PE
11955
RAMPS ENGINEERING, INC.

RAMMS ENGINEERING, INC.

Structural Design
2100 W. 70th STREET, SUITE 311

HALEH, FLORIDA 33016

BB 0006024

METALTECH, INC.
635 W. SECOND CT. HIALEAH, FL 33011

EST. 1957

SEP / RSA

12/01/2007

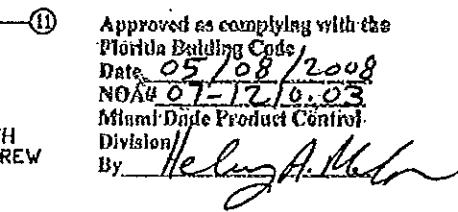
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(E) WALL MOUNT SECTION
NON HURRICANE POSSISION

PRODUCT RENEWED
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By [Signature]
Miami Dade Product Control

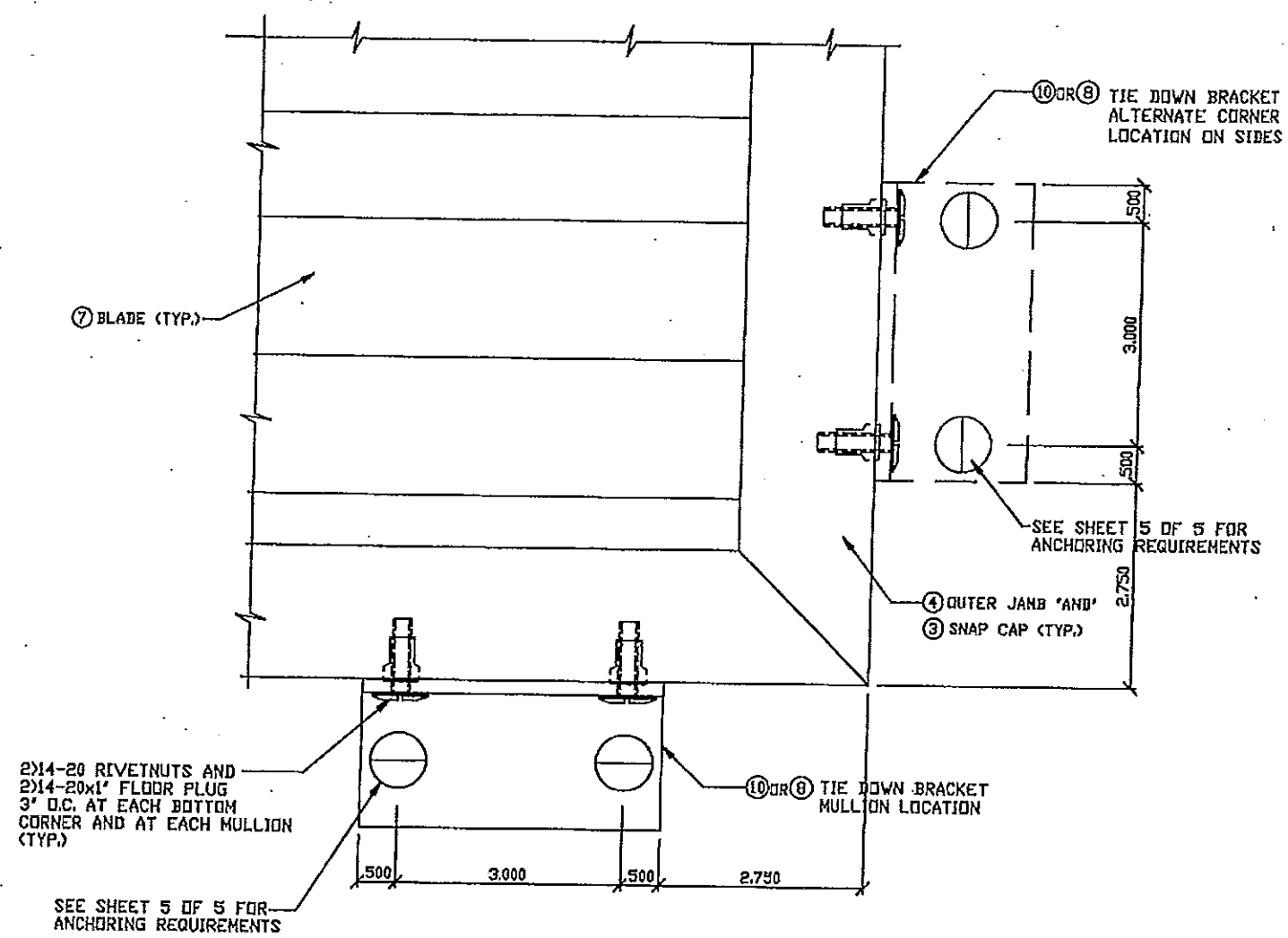
ROBERT S. MONSOUR, PE
11955
RAMMS ENGINEERING, INC.

RAMMS ENGINEERING, INC.
Structural Design
2100 W. 70th STREET, SUITE 311
MILWAUKEE, WISCONSIN 53224
TEL: 414/353-1100
FAX: 414/353-1101

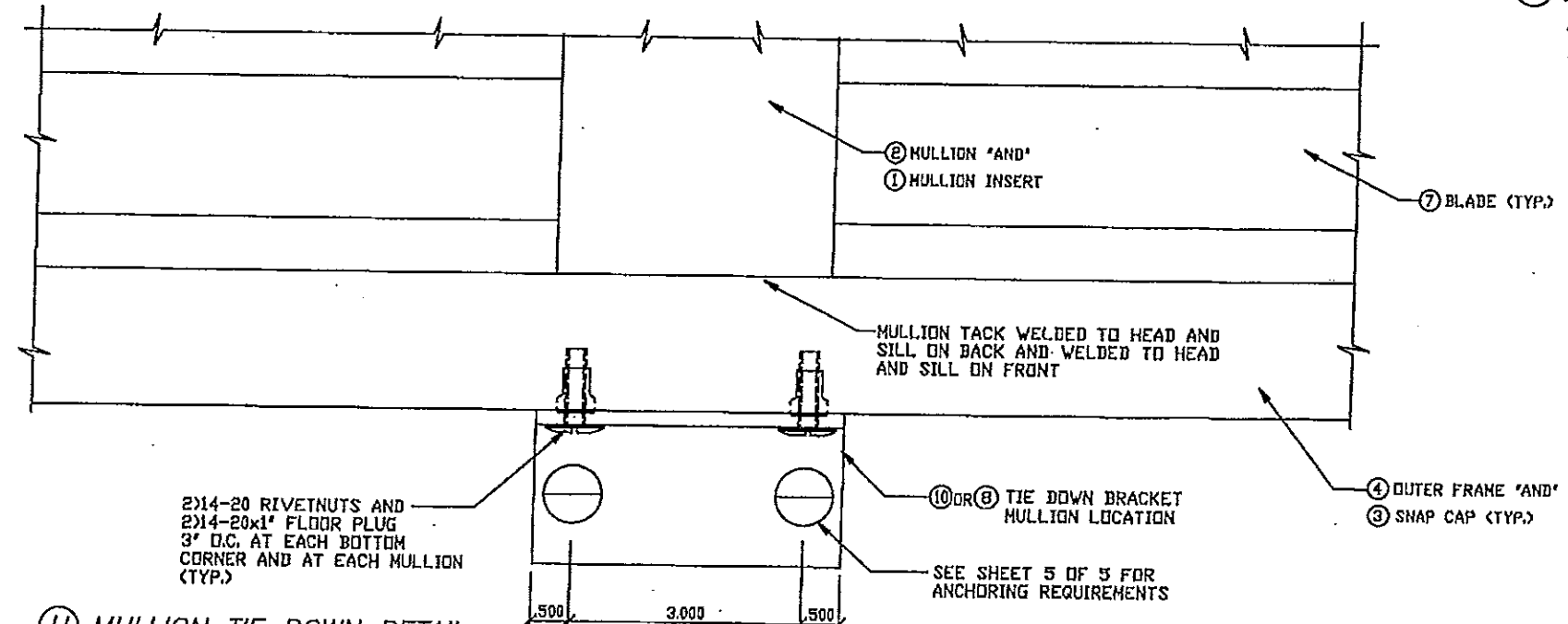
METALTECH, INC.
335 W. SECOND ST. HIALEAH, FL 33014



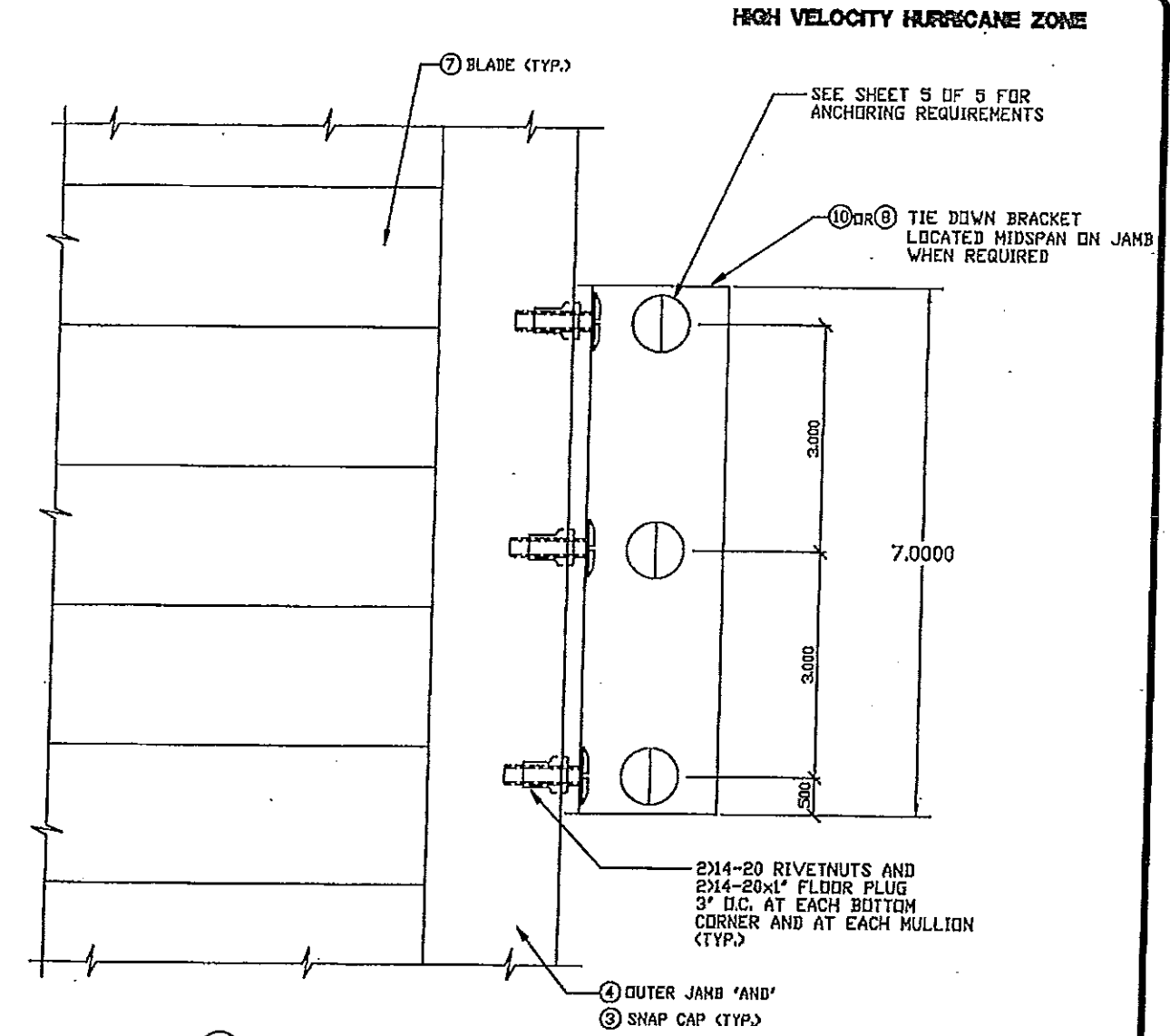
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APPROVED
DATE
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F CORNER TIE DOWN DETAIL
HURRICANE POSITION
(TYP.) RIGHT AND LEFT CORNERS



H MULLION TIE DOWN DETAIL
HURRICANE POSITION
(TYP.) EACH MULLION



G JAMB TIE DOWN DETAIL
HURRICANE POSITION
(TYP.) RIGHT AND LEFT SIDE

NOTE:
WHEN #8 TIE DOWN Z BRACKET IS USED AS AN ALTERNATIVE TO #10 TIE DOWN BRACKETS, THE Z BRACKET IS NOT REQUIRED TO BE ATTACHED TO THE SHUTTER. THE Z BRACKET ONLY NEEDS TO BE ANCHORED TO THE WALL.

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By: *[Signature]*
Miami Dade Product Control

Approved as complying with the
Florida Building Code
Date 05/08/2008
NO# 07-1210.03
Miami Dade Product Control
Division
By: *[Signature]*

[Signature]
3/27/08
ROBERT S. MONSOUR, PE
11955
RAMMS ENGINEERING, INC.

HIGH VELOCITY HURRICANE ZONE

REVISIONS	BY

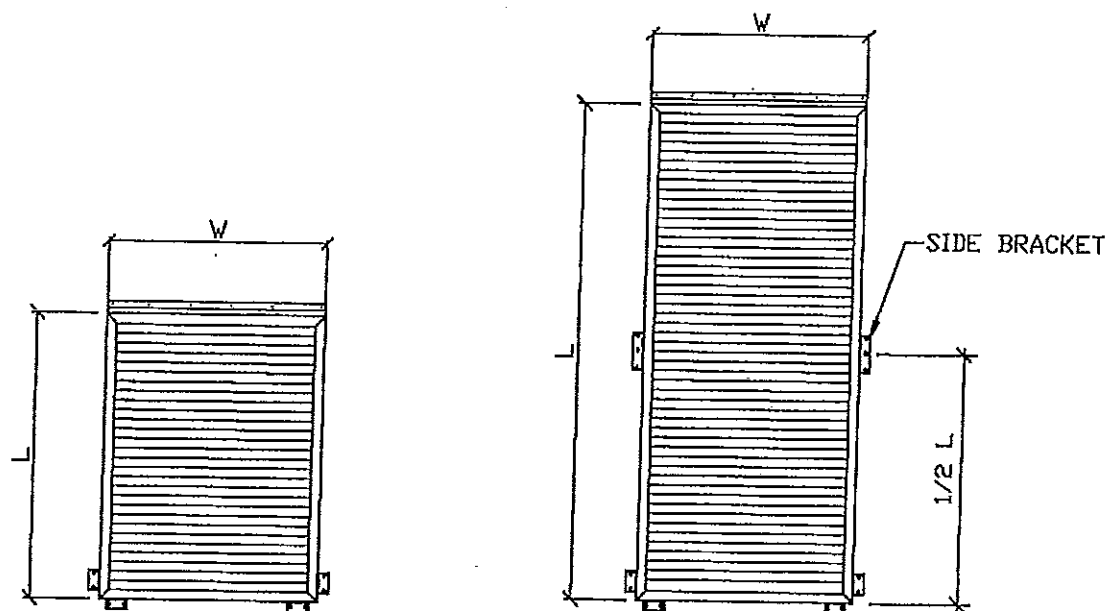
RAMMS ENGINEERING, INC.
Structural Design
2100 W. 79th STREET, SUITE 311
HALEAH, FLORIDA 33016
EB 0006024

METALTECH, INC.
7835 W. SECOND CT. HIALEAH, FL 33014
EST. 1957
EXPERIENCED WORLD-WIDE

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12/01/2007
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CHART 1 MAXIMUM SIZE VS DESIGN PRESSURE

SINGLE UNIT (SECTION) ELEVATION



CORNER BRACKETS MAY BE INSTALLED ON BOTTOM OR SIDE ONE PER CORNER

DESIGN RATING PRESSURE IN P.S.F.	MAXIMUM WIDTH "W"	MAXIMUM SPAN "L"		
		W/O SIDE BRACKET	WITH SIDE BRACKET	MINIMUM SEPARATION TO GLASS
+67.2 , -75.6	42"	57 9/16"	N/A	3 1/4"
+67.0 , -90.0	42"	N/A	92 3/8"	3"

SEE SHEET 4 OF 5 FOR BRACKET SPECIFICATIONS

ANCHOR SPACING

ALL HEADER ANCHOR SPACING 8" O.C.
ALL BRACKET ANCHOR SPACING 3" O.C.

INTO POURED CONCRETE OR CONCRETE BLOCK

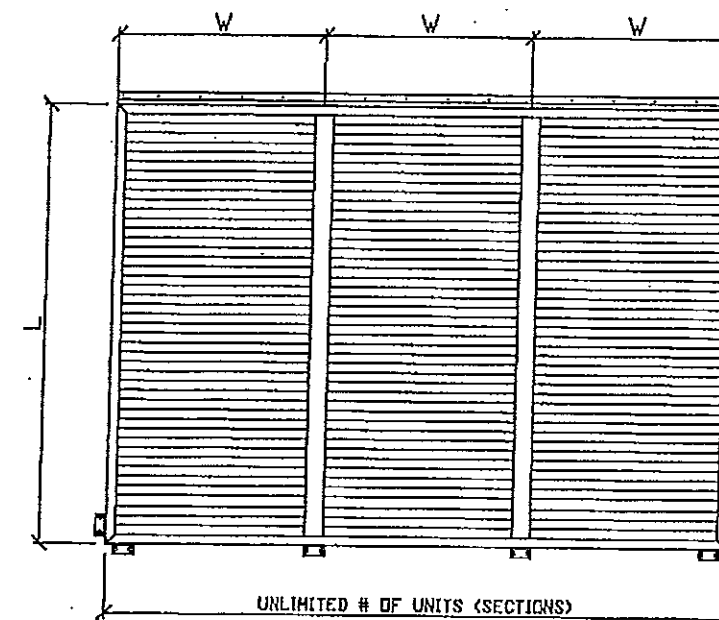
ANCHOR SPACING

ALL HEADER ANCHOR SPACING 6" O.C.
ALL BRACKET ANCHOR SPACING 3" O.C.

INTO WOODEN STRUCTURES

CHART 2 MAXIMUM SIZE VS DESIGN PRESSURE

MULTIPLE UNIT (SECTIONS) ELEVATION



CORNER BRACKETS MAY BE INSTALLED ON BOTTOM OR SIDE ONE PER CORNER

DESIGN RATING PRESSURE IN P.S.F.	MAXIMUM WIDTH "W"	MAXIMUM SPAN "L"		
		W/O SIDE BRACKET	WITH SIDE BRACKET	MINIMUM SEPARATION TO GLASS
+54.0 , -70.0	30"	85 1/4"	N/A	3 9/16"

SEE SHEET 4 OF 5 FOR BRACKET SPECIFICATIONS

ANCHORAGE OF SHUTTER TO CONCRETE OR MASONRY
AT HEADER SHALL BE WITH 1/4" MASONRY SCREWS
WITH 1 1/4" MINIMUM EMBEDMENT.

ANCHORAGE OF SHUTTER TO CONCRETE OR MASONRY
AT BRACKETS SHALL BE 1/4-20 MACHINE SCREW ANCHOR WITH
7/8" MIN. EMBEDMENT OR FEMALE PANELMATE WITH 1/4-20 M/S
(FLOOR PLUG) WITH 1 1/2" MIN. EMBEDMENT OR 1/4" MALE
PANELMATE WITH 1/4-20 WASHERED WINGNUTS WITH 1 1/2"
MIN. EMBEDMENT.

ANCHORAGE OF SHUTTER TO WOOD AT HEADER SHALL BE
1/4" WOOD LAGS WITH 1" MIN. EMBEDMENT OR 1/4" MASONRY
SCREWS WITH 1 7/8" MINIMUM EMBEDMENT

ANCHORAGE OF SHUTTER TO WOOD AT BRACKETS SHALL BE
1/4" MALE PANELMATES WITH 1/4-20 WASHERED WINGNUTS
OR 1/4" FEMALE PANELMATE WITH 1/4-20 M/S (FLOOR PLUG)
WITH 1 7/8" MINIMUM EMBEDMENT.

Approved as complying with the
Florida Building Code
Date 05/08/2008
NOAH 07-1210-03
Miami Dade Product Control
Division
By Helmy A. Helmy

ROBERT S. MONSOUR, PE
11955
RAMMS ENGINEERING, INC.

HIGH VELOCITY HURRICANE ZONE

REVISIONS	BY

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DADE COUNTY, FLORIDA 33016
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7035 W. SECOND CT. HIALEAH, FL 33014
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